

REMARKS

Applicants have amended the specification as suggested by the Examiner, amended claims 23 and 25, and added new claim 35. No new matter has been added to the application by virtue of the present amendment.

Therefore, claims 23-28 and 35 are pending in the subject application by virtue of the present amendment. It is respectfully requested that the pending claims 23-28 and 35 be reconsidered and passed to issuance.

PTO-892 Notice of References Cited

Applicants note that USPN 6,827,827 is listed in form PTO-892. As discussed herein below, the present application is a divisional of USPN 6,827,827 and, as such, USPN 6,827,827 should not be listed as a prior art reference since the present application claims priority to USPN 6,827,827. Since USPN 6,827,827 is not statutory prior art to the present application, Applicants respectfully request removal of USPN 6,827,827 from form PTO-892.

Response to Restriction Requirement

In response to the Restriction Requirement, Applicants elect the claims of Group I, without traverse. Thus, the claims that are readable on the elected species and variations for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable include: claims 23-28.

Also, upon the allowance of a generic claim, Applicant wishes to re-open consideration of claims to additional species and variations which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141.

Specification

Applicants have amended paragraph [0001] as suggested by the Examiner.

Claim Rejections – 35 U.S.C. 102(e)

The Examiner has rejected claims 23-28 under 35 U.S.C. 102(e) as being anticipated by Simpson et al. (USPN 6,174,425), Hanson et al. (USPN 6,254,742) and Uzoh et al. (USPN 6,261,426).

Applicants have amended independent claim 23. Support for Applicants amendment can be found, for example, in paragraphs [0013] and [0045-0047], and Figure 4. Claims 24-28 and 35 are dependent upon claim 23, as amended. Applicants' claimed invention is directed to windows having sizes (i.e. area) and locations in the insulating adjustment plate which correspond to pattern densities of portions of the object to be plated. That is, the sizes and locations of the windows are dependent upon the object to be plated and are not simply determined to provide a pre-determined fluid/current flow regardless of a pattern density on the object. For example, a first size of window is located in the vicinity of a high pattern density region of the object to be plated, and a second size window different than the first is located in the vicinity of a lower pattern density region of the object to be plated. By having window sizes which correspond to the pattern densities located in the vicinity of the object to be plated, a substantially constant current density on the object can be achieved resulting in uniform plating of metal of the portions even in different pattern density regions.

Applicants respectfully submit that Simpson, Hanson, Uzoh, individually or in combination, neither anticipate, teach or suggest Applicants' claim 23, as amended. Simpson, Hanson and Uzoh are silent on sizes and locations of windows in an insulating adjustment plate which correspond to pattern densities of portions of an object to be plated. Simpson shows a

JP9-1999-0277-US2

uniform set of holes in diffuser 30 and is silent on using various hole sizes/location in diffuser 30 corresponding to a pattern density on the substrate. Hanson discloses a spiral plate 112 having a pattern and a substrate is rotated relative to the plate 112 to improve uniformity, however, Hanson is silent on disclosing a spiral plate 112 having a pattern that corresponds to a pattern density on the substrate. Uzoh discloses a baffle having uniform holes or a baffle having uniform larger holes in the center with uniform smaller holes at the edges. Uzoh is silent on a baffle having holes which correspond to a pattern density on a substrate.

Since Simpson, Hanson and Uzoh do not have window sizes which correspond to the pattern densities of the portions located in the vicinity of the object to be plated, a non-uniform current density on the object is achieved due to the different pattern density regions resulting in non-uniform plating of metal of the portions.

Therefore, Applicants believe the rejections to the claims under 35 U.S.C. 102(e) have been overcome.

Double Patenting

The Examiner has rejected claims 23-28 on the grounds of non-statutory obviousness-type double patenting as being unpatentable over claims 1, 2, 7 and 19-21 of U.S. Patent No. 6,827,827.

Applicants respectfully submit that the double patenting rejection in view of U.S. Patent No. 6,827,827 is improper since the present application is a divisional of USPN 6,827,827. 35 U.S.C. 121 precludes a double patenting rejection in a divisional application (“... an application filed as a result of such a [restriction] requirement, shall not be used as a reference either in the Patent and Trademark Office or in the courts against a divisional application ...”). The present

application is a divisional of U.S. Patent No. 6,827,827 as was indicated in the original filing documents for the present application and was acknowledged by the USPTO in the filing receipt for the present application dated 01/23/2004. Claims 23-28 were subject to a restriction requirement in USPN 6,827,827; claims 23-28 were canceled from USPN 6,827,827; and, claims 23-28 were then filed in the present application as they were originally filed in USPN 6,827,827.

Even if the Examiner believes that the double patenting rejection is proper, Applicants respectfully submit that claim 23, as amended, and claims dependent thereupon, are patentably distinct from USPN 6,827,827.

Therefore, Applicants believe the rejection to the claims based on non-statutory obviousness-type double patenting has been overcome.

CONCLUSION

Prompt and favorable examination on the merits is respectfully requested. Applicants respectfully submit that the entire application is in condition for allowance. However, the Examiner is urged to call the undersigned at the number listed below if, in the Examiner's opinion, such a phone conference would aid in furthering the prosecution of this application. No fee is due by virtue of this amendment. However, if the PTO determines that a fee is required, please charge Applicants' Deposit Account, 09-0456.

Respectfully Submitted,

For: Nakamoto et al.,

By: ___/Anthony J. Canale/_____
Anthony J. Canale
Registration No. 51,526
Agent for Applicants
Phone: (802) 769-8782
Fax: (802) 769-8938
Email: acanale@us.ibm.com

IBM Corporation
Intellectual Property Law - Zip 972E
1000 River Street
Essex Junction, Vermont 05452